Two-Way Power Divider
10-2000MHz

Features
- Fully Hermetic Package
- Loss: 0.6 dB Typical Mid-band
- Isolation: 28 dB Typical Mid-band
- VSWR: 1.2:1 Typical Mid-band
- Impedance: 50 Ohms Nominal
- Maximum Power Rating or Input Power: 250 mW Max.
- Internal Load Dissipation: 50 mW Max.
- MIL-STD-202 Screening Available

Description
A Power Divider is ideally a lossless reciprocal device which can also perform vector summation of two or more signals and thus is sometimes called a power combiner or summer.

Ordering Information

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<td>FP-2</td>
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<tr>
<td>DSS-313 PIN</td>
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FP-2 (DS-313)

SF-1 (DSS-313)

For further information and support please visit:
https://www.macom.com/support

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### DS-313 Electrical Specifications

**Parameter** | **Test Conditions** | **Frequency** | **Units** | **Min** | **Typ.** | **Max**
---|---|---|---|---|---|---
Insertion Loss | Less Coupling | 20 - 1000 MHz | dB | — | — | 1.1
 | | 10 - 1500 MHz | dB | — | — | 1.3
 | | 1500 - 2000 MHz | dB | — | — | 1.8
Isolation | — | 20 - 1000 MHz | dB | 23 | — | —
 | | 10 - 1500 MHz | dB | 18 | — | —
 | | 1500 - 2000 MHz | dB | 12 | — | —
Amplitude Balance | — | 20 - 1000 MHz | dB | — | — | 0.3
 | | 10 - 1500 MHz | dB | — | — | 0.4
 | | 1500 - 2000 MHz | dB | — | — | 0.6
Phase Balance | — | 20 - 1000 MHz | ° | — | — | 4
 | | 10 - 1500 MHz | ° | — | — | 6
 | | 1500 - 2000 MHz | ° | — | — | 8
VSWR | All Ports | 20 - 1000 MHz | Ratio | — | — | 1.5:1
 | | 10 - 1500 MHz | Ratio | — | — | 1.6:1
 | | 1500 - 2000 MHz | Ratio | — | — | 1.8:1

### DSS-313 Electrical Specifications

**Parameter** | **Test Conditions** | **Frequency** | **Units** | **Min** | **Typ.** | **Max**
---|---|---|---|---|---|---
Insertion Loss | Less Coupling | 20 - 1000 MHz | dB | — | — | 1.1
 | | 10 - 1500 MHz | dB | — | — | 1.3
 | | 1500 - 2000 MHz | dB | — | — | 1.8
Isolation | — | 20 - 1000 MHz | dB | 22 | — | —
 | | 10 - 1500 MHz | dB | 18 | — | —
 | | 1500 - 2000 MHz | dB | 12 | — | —
Amplitude Balance | — | 20 - 1000 MHz | dB | — | — | 0.3
 | | 10 - 1500 MHz | dB | — | — | 0.4
 | | 1500 - 2000 MHz | dB | — | — | 0.6
Phase Balance | — | 20 - 1000 MHz | ° | — | — | 5
 | | 10 - 1500 MHz | ° | — | — | 8
 | | 1500 - 2000 MHz | ° | — | — | 11
VSWR | All Ports | 20 - 1000 MHz | Ratio | — | — | 1.5:1
 | | 10 - 1500 MHz | Ratio | — | — | 1.6:1
 | | 1500 - 2000 MHz | Ratio | — | — | 1.8:1

1. All specifications apply with 50 ohm source and load impedance.
Typical Performance Curves

*Insertion Loss - Ports \( \Sigma - C, \Sigma - D \)*

*Isolation - Ports C-D*

*VSWR*

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10-2000MHz

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